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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,247	07/05/2006	Shinichi Wada	050850-07108	9597

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Dickinson Wright PLLC
James E. Ledbetter, Esq.
International Square
1875 Eye Street, N.W., Suite 1200
Washington, DC 20006

EXAMINER

ASHFORD, TAMARA R

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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11/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,247	Applicant(s) WADA, SHINICHI	
	Examiner Tamara Ashford	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to the papers filed on August 13, 2009.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al. (US 20050060734 A1).

Regarding claim 1, Aoyama et al. (hereinafter referred as "Aoyama") discloses a disk apparatus (Fig. 2, 1) comprising a chassis outer sheath having a base body (Fig. 3, 1a) and a lid (Fig. 3, 5a). A disk inserting opening into which a disk is directly inserted is formed on the front surface of the sheath (Fig. 1, 21). The base body is formed with a deep bottom (Fig. 3, 4) and a shallow bottom (Fig. 3, 4a). As shown in figure 3 the shallow bottom is disposed on a side of the deep bottom and the lid covers both (Paragraph 67). Aoyama also discloses a first narrow groove projecting toward the base body and a second narrow groove projecting opposite from the first narrow groove (see Fig. 4 below) are adjacently formed on a front end of the cover. As shown in figure 4 below, the second narrow groove is provided on the outermost periphery of the front end of the cover. Aoyama further discloses a wall formed around the

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periphery of the lid except at the front end (see Fig. 4 below). Aoyama does not disclose the first narrow groove is gradually increased in height from its center toward its end. Aoyama discloses guide projections (Fig. 4, 8a and 8b) extending inward from side portions of the cover that guide the disk and limit the disk movement vertically (Paragraph 65). These projections are shaped such that their height is gradually increased toward the side edges (Paragraph 65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first narrow groove such that it also is gradually increased in height from its center toward its end to provide additional disk guidance as it is being loaded.

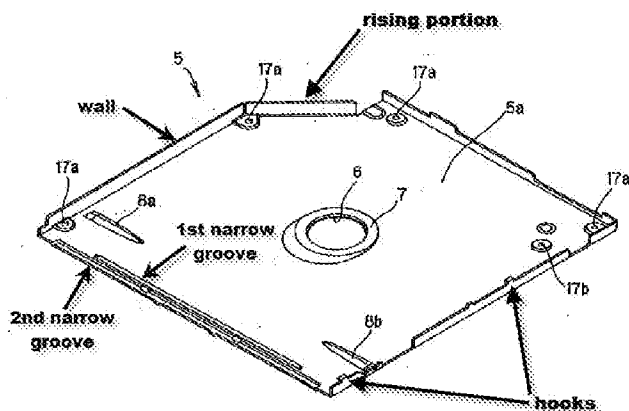


FIG. 4

Regarding claim 2, Aoyama discloses the length of the second narrow groove corresponds to a width of a disk (Fig. 4) however the first narrow groove is shown shorter in length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the length of the first narrow groove to match that of the second to aid in disk guidance by covering the entire length of the disk as well as give the front end of the cover a uniform appearance. Such a

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modification would involve a mere change in the size of the groove and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 5 and 6, Aoyama discloses the shallow bottom includes a connection end, an opposed end, and an inclined end (see body from Fig. 5 below). Aoyama also discloses a side wall (rising portion) extends toward the lid (see Fig. 5 below) and is formed at its upper edge with a connection piece which extends toward the deep bottom (Fig. 5, 18a, and Paragraphs 70 and 72). As shown in figure 5, the connection piece is provided on an end of the opposed end which is connected to the inclined end. Aoyama utilizes the connection piece to attach the cover to the base and to help provide rigidity (Paragraph 72).

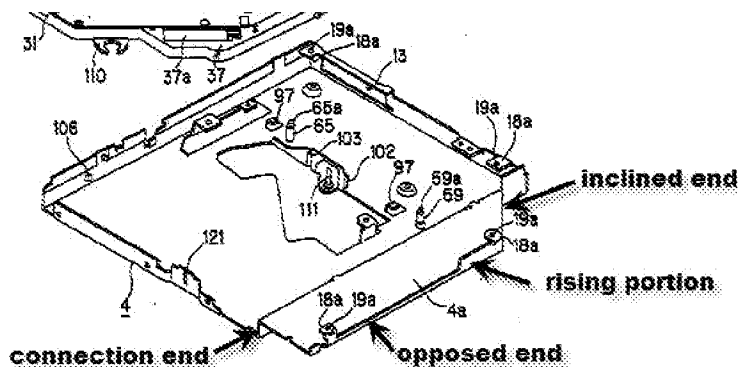


FIG. 5

Regarding claim 7, Aoyama discloses a rising portion formed on the lid that abuts the inclined end (see Fig. 4 above), but does not disclose a rising portion formed at the inclined end that abuts against the cover. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a rising portion on

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the inclined end of the shallow bottom near the connection piece to provide additional support and rigidity for the connection piece to prevent possible deformation when the fasteners are attached.

Regarding claims 8 and 9, Aoyama discloses connection pieces parallel to a surface of the deep bottom formed on an upper end of a rear sidewall of the deep bottom (Fig. 5, 18a) used to attach the cover. Aoyama does not disclose one of the connection pieces is provided in a corner on the side of the shallow bottom. It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the connection pieces as necessary to provide the most secure fit between the lid and the body. In addition, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claims 10, and 11, Aoyama discloses hooks (see Fig. 4 above) that are engaged with the deep bottom side of the base body are formed on the sidewall of the cover. Aoyama does not disclose a hook located in the center of the rear wall of the cover engaged with the rear wall of the base body. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a hook in this location to attach the cover. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8 (7th Cir. 1977).

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3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama (US 20050060734 A1) in view of Cho et al. (US 20030128645 A1).

Regarding claim 3, Aoyama discloses the cover is provided at its central portion with an opening (Fig. 4, 6, and Paragraph 64) and a ring-like narrowed portion projecting toward the base body (Fig. 4, 7). Aoyama does not disclose the ring-like narrowed portion comprises first and second ring-like narrowed portions. Cho et al. (hereinafter referred as "Cho") discloses a disc apparatus in which the cover is provided with concentric narrowed portions surrounding an opening (Fig. 6, 243, 244a, and Paragraph 40-41). Cho also shows in figure 6 the projecting height (as measured from the bottom surface of the housing) of the outermost ring-like narrowed portion is higher than a projecting height of the inner ring-like narrowed portion. Cho states the projections reinforce the cover (Paragraph 44). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second ring-like narrowed portion to the lid disclosed by Aoyama, as with Cho, to reinforce the cover.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama (US 20050060734 A1) in view of Saji et al. (US 20020159373 A1).

Regarding claim 4, Aoyama discloses a front guider (Fig. 43) at the front surface of the base body. However, Aoyama does not disclose the guider lies astride the deep and shallow bottoms, or that it is attached to the deep and shallow bottoms. Saji discloses a front guider (Fig. 1A, 250) positioned near the front surface of a disk

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apparatus which lies astride and fastens to the deep bottom and shallow bottom (Paragraph 85). It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate and attach the front guider such that it lies astride and attaches to both the deep and shallow bottoms, as with Saji, to eliminate the need for one or more of the other disc guide arms.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Kim et al. (US 6,603,659 B2) discloses adjacent ribs (Fig. 2) on the cover located at the front of the disc drive apparatus.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Ashford whose telephone number is (571)270-5877. The examiner can normally be reached on Mon-Fri 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571)272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A./
Examiner, Art Unit 2627

/Craig A. Renner/
Primary Examiner, Art Unit 2627